

Appl. No. 09/806,047
Request Dated Nov. 25, 2003
Reply to Office Action of Aug. 28, 2003

REMARKS

Claims 1-19 are pending in the present application. Claims 1-19 stand rejected. Claim 1 has been amended to add "(a)" and "(b)" to maintain consistency with other claims and to improve clarity. Claims 1, 10, and 11 have been amended to recite a more preferred embodiment of the present invention. Support for this amendment is found at page 11, lines 1-11 of the specification.

It is believed that these changes do not involve introduction of new matter. Consequently, entry of these changes is believed to be in order and is respectfully requested.

INVENTION SYNOPSIS

The present invention relates to an elastic laminate which is elastically extensible in at least one direction. The elastic laminate includes an elastomeric layer a first surface and a second surface opposing the first surface and a first nonwoven layer joined to the first surface of the elastomeric material. The elastomeric layer is in a form selected from the group consisting of a scrim, an apertures formed film, an elastomeric woven or nonwoven, discrete strands and strings. The first nonwoven layer is formed from component fibers having a primary fiber direction. The first nonwoven layer has a Fiber Orientation Ratio within about ± 20 degrees from a primary fiber direction of at least about 65%. The present invention is also directed to a disposable garment employing such an elastic laminate.

REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 1-8 and 10-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Gompel et al. (U.S. Patent No. 4,940,464) (hereafter "Van Gompel") in view of Masahiko et al. (JP Pub. 03-158236) (hereafter "Masahiko"). The Examiner rejected the claims based upon the reasoning set forth in the previous office action dated March 10, 2003. The March Office Action states that Van Gompel discloses a disposable pant-like garment for absorbing human discharge and comprises an absorbent assembly comprising a liquid-impervious outer cover, liquid pervious liner, and an absorbent core contained there between. The Office mentions that the disclosed garment includes side panels that are stretchable and that can be made of stretch bonded laminate, which generally comprises an elastic layer disposed between two nonwoven layers. Although the Office concedes that Van Gompel fails to teach that the nonwoven layers

· Appl. No. 09/806,047
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have preferred fiber orientation, Masahiko is presented as teaching a laminate having a thermoplastic rubber layer and a nonwoven layer having fibers, such as polypropylene or polyester arranged longitudinally in parallel or zigzag direction. Consequently, the Office contends that it would have been obvious for one of ordinary skill in the art to use the nonwoven of Masahiko in place of Van Gompel's nonwoven. Applicants respectfully traverse this rejection.

Van Gompel teaches the subject matter as presented above including side panels that are stretchable and that can be made of stretch bonded laminate, which generally comprises an elastic layer disposed between two nonwoven layers. Masahiko teaches:

Stretchable laminates which are composed of (a) thermoplastic rubber layers composed of 10-150 parts by weight ethylene copolymers and 100 parts by weight hydrogenated block copolymers obtained by hydrogenation of block copolymers composed of polymer block A having at least one aromatic vinyl compound as the main constituent and polymer block B having at least one conjugated diene compound as the main constituent, and (b) nonwoven fabric layers.

Masahiko *as translated* page 4, lines 15-19. Masahiko further teaches that the nonwoven fabric layer comprises a nonwoven wherein the fibers are oriented in the warp direction or oriented randomly in the warp direction. Masahiko *as translated* page 7, lines 23-26.

Applicants submit that the Office has failed to establish a prima facie case of obviousness and, as a result, Claims 1-8 and 10-19 should be allowed as currently amended. Applicants point to several errors in the Office's asserted prima facie case of obviousness.

First, the Office has failed to consider the cited references in their entirety including the teachings away from Applicants' claimed invention. Case law states that, "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). Masahiko identifies several problems encountered when utilizing traditional elastomers:

[W]hen traditionally known polyurethanes, polyesters, polybutadienes, silicones, styrene-butadiene copolymers, natural rubber, etc., were used to prepare rubber elastic films, the film formability was very poor, the productivity was very poor and the weather resistance, color tone, odor, etc., of the thus prepared rubber elastic films were inferior.

- Appl. No. 09/806,047
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Masahiko *as translated* page 4, lines 7-10. Masahiko then states that "it was found that when thermoplastic rubber made of *specific* hydrogenated block copolymers and ethylene copolymers were used, the problems were solved, and thereby the present invention was completed." Masahiko *as translated* page 4, lines 11-13 (emphasis added). Masahiko teaches that the thermoplastic rubber is "composed of 10-150 parts by weight ethylene copolymers and 100 parts by weight hydrogenated block copolymers obtained by hydrogenation of block copolymers composed of polymer block A having at least one aromatic vinyl compound as the main constituent and polymer block B having at least one conjugated diene compounds as the main constituent." Masahiko *as translated* page 4, lines 15-19.

Masahiko further reinforces the need for a specific thermoplastic rubber formulation within the Comparative Examples. As a result of Comparative Example 1, Masahiko states, "[I]t is clear that the hydrogenated copolymer is an essential element of the present invention." Masahiko *as translated* page 11, lines 15-16. Furthermore, as a result of Comparative Example 2, Masahiko states, "[I]t is clear that the ethylene copolymer is an essential element of the present invention." Masahiko *as translated* page 11, lines 25-26. Masahiko clearly teaches the use of a thermoplastic rubber made of specific hydrogenated block copolymers and specific ethylene copolymers to overcome problems associated with the use of traditional elastomers such as polybutadienes and styrene-butadiene copolymers.

Taken by itself, Masahiko fails to obviate Applicants' claimed invention as amended. Regarding Claim 1, Applicants claim an elastomeric woven or nonwoven and discrete strand and strings comprising a polystyrene thermoplastic elastomer selected from the group consisting of a styrene-butadiene-styrene thermoplastic elastomer, a styrene-isoprene-styrene thermoplastic elastomer, a styrene-ethylene/butylene-styrene thermoplastic elastomer, a styrene-ethylene/propylene-styrene thermoplastic elastomer, a styrene-ethylene/propylene thermoplastic elastomer, a hydrogenated styrene butadiene rubber, and a mixture thereof. The polystyrene thermoplastic elastomers claimed by Applicants are not taught by Masahiko. Additionally, the use of Applicants' claimed polystyrene thermoplastic elastomers is not suggested by Masahiko since Masahiko clearly teaches the use of a specific thermoplastic rubber (i.e., made of specific hydrogenated block copolymers and specific ethylene copolymers). As a result, one of ordinary

Appl. No. 09/806,047
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skill in the art would not have been motivated to alter the thermoplastic rubber of Masahiko to yield Applicants' claimed invention. Thus, Masahiko fails to teach or suggest all of Applicants' claimed limitations.

Second, with regard to combining the Van Gompel and Masahiko references, case law states that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *See In re Ratti* 270 F.2d 810 (CCPA 1959); MPEP §2143.01 (8th ed. 2003). Van Gompel and Masahiko may only be combined such that the elastic layer within the stretch-bonded laminate recited in Van Gompel is limited to the specific thermoplastic rubber recited in Masahiko. Any hypothetical change in the composition of the elastic layer beyond the specific thermoplastic rubber (i.e., one made of specific hydrogenated block copolymers and specific ethylene copolymers) alters the principle of operation of Masahiko, and such change is prohibited. In light of restrictions recited in Masahiko, Van Gompel adds little to the hypothetical stretch-bonded laminate since the elastic layer is limited to that of Masahiko. As a result, the hypothetical combination Van Gompel and Masahiko would fail to teach or suggest all the limitations of Applicants' claimed invention. In particular, the hypothetical combination fails to teach or suggest Applicants' polystyrene thermoplastic elastomers.

Just as Claim 1 is not obviated for the reason presented above, Claims 2-8 depending therefrom and containing all limitations of Claim 1 are also nonobvious. Claims 10 and 11 have been amended to recite an "elastomeric woven or nonwoven and discrete strand and strings comprising a polystyrene thermoplastic elastomer." Thus, for the same reason presented above, Claims 10-11 and Claims 12-19 dependent therefrom are also nonobvious. *See In re Fine*, 837 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Gompel in view of Masahiko and Dean et al. (U.S. Patent No. 6,231,976) (hereafter "Dean"). The Office acknowledges that Van Gompel and Masahiko fail to teach that the fibers in the non-elastic nonwoven are bicomponent fibers. The Office asserts that Dean teaches that bicomponent binder fibers can be used to make nonwovens to eliminate the need for a separate

· Appl. No. 09/806,047
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adhesive. The Office concludes that it would have been obvious for one of ordinary skill to have used the bicomponent fibers to make the non-elastic nonwoven. Applicants respectfully traverse this rejection.

Claim 9 is nonobvious because the references cited by the Office fail to teach or suggest every claim limitation as presented by Applicants. For the reasons presented above, Claim 1 is not obviated. Claim 9 depending therefrom and containing all limitations of Claim 1 is likewise also nonobvious. *See In re Fine*, 837 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

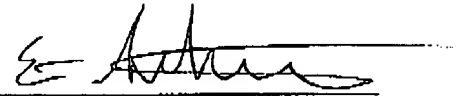
CONCLUSION

Based on the foregoing reasons, Applicants respectfully submit that the Office has not made a prima facie case of obviousness and the rejections are therefore improper. Reconsideration and withdrawal of the rejections are respectfully requested. Allowance of each of the pending claims in the next Office Action if respectfully requested.

Respectfully Submitted,

For: Rezai et al.

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